

Zentera Empowers Siemens

for Secure Access and Collaboration, Protecting Its Data and Applications

Siemens has a broad set of customers worldwide and needed the right technology solution to support secure access, collaboration and protection for its comprehensive suite of product lifecycle management tools. Zentera helped Siemens achieve the business goals of flexible and agile collaboration, while satisfying stringent security requirements for IP protection, both for Siemens and for its customers.

SIEMENS

Siemens Digital Industries Software

Siemens Digital Industries Software, formerly Siemens PLM Software, takes what the future promises tomorrow and makes it real for customers today.

INDUSTRY

Product Lifecycle Management

HEADQUARTERS

Plano, TX (Siemens DISW)
Wilsonville, OR (Mentor)

ZENTERA PRODUCTS

CoIP® Platform

Siemens Digital Industries Software enables companies to develop better electronic products faster and more cost-effectively.

Siemens' innovative products and solutions help engineers conquer bold design challenges in the increasingly complex worlds of board and chip design.

The Challenge

Collaboration is the name of the game for product lifecycle management. Not only do many of design teams already operate on a global scale, delivering such complex products requires tight collaboration between the design team and its partners, suppliers, and customers to avoid costly errors and miscommunications.

Siemens needed the ability to create secure compute environments to support critical business operations such as design services, customer trials, product training, benchmarking and demos, among other uses. Creating and maintaining a shared environment with the required level of security was extremely challenging due to the sensitive nature of the IP.

Of primary importance was Intellectual Property protection, both for Siemens itself as well as its customers. The theft or loss of IP can severely damage a business due to loss of credibility and competitiveness, not to mention the possibility of fines for regulated data, Siemens needed a system with the necessary Data Loss Prevention (DLP) capabilities and safeguards to prevent changes to IT infrastructure from accidentally exposing IP to unnecessary risk.

achieve scalability. They needed the flexibility and agility to be able to design, set up, run, evaluate and tear down an environment in hours, with minimal overhead for the IT team. The company also needed to be able to rapidly establish connectivity for its partners, with control over access credentials as well as the flow of data. Of course, delivering automation and agility could not in any way compromise security for Siemens' IP.

“ CoIP gives you **the security that you need**, and at the same time it gives you a level of agility that you just don't have today in a traditional infrastructure...we can turn things around, create projects, and complete those projects very fast. ”

Senior IT Manager
Siemens

Creating Secure Virtual Chambers

Siemens' first step was to deploy Zentera CoIP zLink sensors to segment the compute in the datacenter into an Virtual Chamber to host the collaboration. Each chamber is defined to match the business requirement, including a mix of Linux and Windows servers as well as shared network services. The CoIP overlay approach enables Siemens to create chambers on-demand without modifying the applications or existing network infrastructure.

CoIP Platform enables a "default block" security model, allowing Siemens to select a set of whitelisted applications that should be allowed communicate to, from, or within each chamber. ZCA blocks and alerts admins when it detects network activity that doesn't match with the prescribed behavior, allowing Siemens to discover and remediate potential threats to their systems.

Key Objectives

- Secure sensitive intellectual property
- Connect globally distributed customers, suppliers and development teams and streamline operations
- Rapid response to support new business initiatives

The Solution

- Zentera CoIP Platform for Virtual Chambers
- Zentera CoIP Platform for ZTNA
- Existing Siemens Identity Provider to authenticate 3rd party users and perform MFA (SAML 2.0)

Business Benefits

- Rapid enablement of secure access, collaboration and operations involving employees, vendors, partners and customers
- Enhanced business agility and productivity
- Works with Siemens' existing IT infrastructure without disruption





Establishing Access Controls

Having done that, the next step was to establish secure access for both internal and external users. Rather than use the corporate VPN, which could potentially expose other resources inside Siemens to external users, Siemens used CoIP Platform's built-in ZTNA to create VPN-less access, authenticated by corporate directory services, that connects to specific resources on need and policy basis.

Users are given a secure remote desktop service (RDP or VNC) that terminates directly on specific landing servers in the chamber, with powerful copy and paste controls. Between ZTNA and the Virtual Chamber, Siemens has complete control over what 3rd party users can do with its data and the access provided.

Centralized Management at a Global Scale

With a global development team, partners, and customers, Siemens needed a solution that would scale. They chose to deploy CoIP Platform's ZNS virtual switches in multiple geographies, allowing them to optimize access to the target chamber or resource, minimizing latency and optimizing wuser experience.

While day-to-day operations can be handled with CoIP Platform's single pane of glass GUI, much of the work was automated by leveraging Zentera's comprehensive suite of APIs, turning setup and teardown of chambers into a completely repeatable task.

For monitoring, Siemens leveraged Zentera's simple integrations with tools such as Splunk, aggregating alerts and system status into their corporate reporting system.



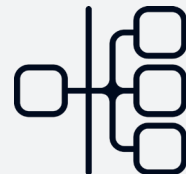
Data Leak Prevention



Worldwide Collaboration



Remote Desktop

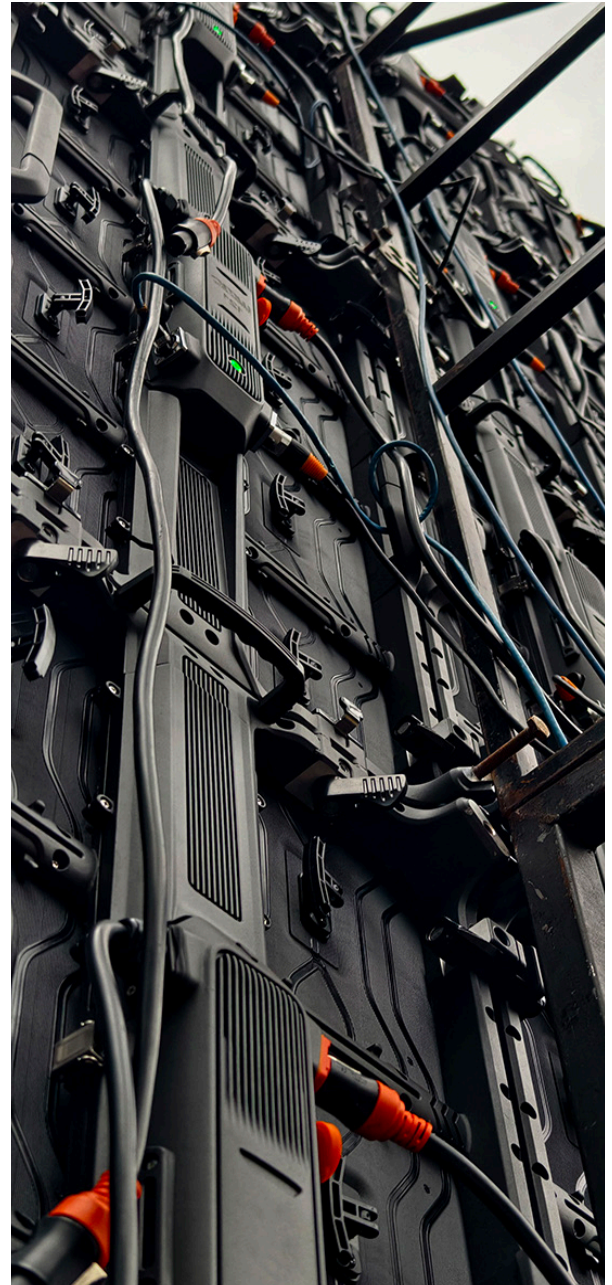


Application Segmentation

Success Breeds Success

Having successfully deployed collaboration chambers in their on-premises datacenter environments, Siemens then replicated the chamber concept to cloud environments, such as AWS. In the cloud, the consistent operations, policies and controls provide additional layers of protection against misconfiguration and eliminate the need to expose any cloud server to the public Internet.

As Siemens has grown comfortable with CoIP Platform, they have continued to find new and innovative ways to leverage its capabilities and fully-integrated security; recently, CoIP Platform powered an extended worldwide remote beta test of Teamcenter and Active Workspace, which brought together participants from over 45 companies from around the globe.



Copyright© 2020-2025 Zentera Systems, Inc. All rights reserved. Zentera®, Zentera CoIP®, CoIP®, Cloud over IP®, and certain other marks are registered trademarks of Zentera Systems, Inc., in the U.S. and other jurisdictions, and other Zentera names herein may also be registered and/or common law trademarks of Zentera. All other product or company names may be trademarks of their respective owners.